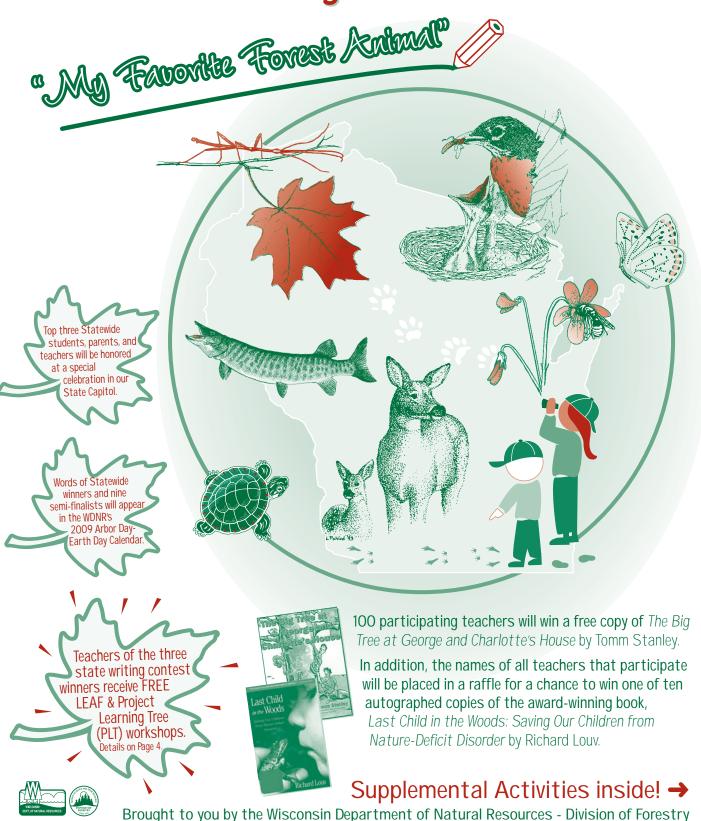
2008 Forest Appreciation Week Writing Contest



Dear 4th Grade Teachers and Friends,

January 17, 2008

Teachers, it's time to participate in the 19th Annual Forest Appreciation Week Writing Contest! By combining creativity with pencil and paper, one of your fourth grade students has a chance to win savings bond prizes, a landscape tree (includes planting) for their community or school grounds, see their words in print, and be recognized at a special Arbor Day celebration in our State Capitol . . . if they enter the 2008 Writing Contest! Awards, prizes, ceremony, and calendar are sponsored by the Wisconsin Woodland Owners Association, the Wisconsin Arborist Association, the Wisconsin Nursery Association, the Learning Experiences and Activities in Forestry (LEAF) K-12 Forestry Education Program, the Project Learning Tree (PLT) Program, and the Department of Natural Resources Forestry Division.

Teachers can win too! The first 100 teachers that enter this year's contest will receive a copy of Tomm Stanley's book, "The Big Tree at George and Charlotte's House." Woven into the tale of two youngsters playing in a tree, this book houses an ecological learning adventure that takes the reader on a journey from a tree's roots to its leaves. But that's not all – the names of all teachers that participate will be placed in a raffle for a chance to win one of ten autographed copies of the award-winning book, "Last Child in the Woods: Saving Our Children from Nature-Deficit Disorder" by Richard Louv. Both resources are sure to provoke your thoughts on natural resources and enhance your classroom activities! In addition, the teachers of our top three state winners will receive scholarships for both a LEAF and PLT teacher workshop.

This year's theme, "My Favorite Forest Animal," asks students to write about a forest animal that they have observed. Wisconsin's forest creatures come in all shapes and sizes . . . from the smallest insect to the largest black bear. Encourage your students to choose a forest animal that has captured their imagination and has increased their sense of wonder and knowledge about our forest resource. For inspiration, check out the supplemental activities and internet resources provided in this contest packet.

Contest requirements can be found on page 3 and copies of the contest packet can be downloaded from the EEK! (Environmental Education for Kids) website. Go to the "Teacher Pages" under educational resources at http://www.dnr.wi.gov/eek/teacher/edres.htm. Add us to your favorites and bookmark EEK!, because in April the writings of the three state winners and nine semi-finalists will be posted there for world-wide viewing.

Join in the celebration of Arbor Day (April 25) and Earth Day (April 22) every day by encouraging your students to enter this year's contest. Please take a few moments to read words shared by a participating teacher.

"This is a belated thank-you for all that was done for my student, her family and me during the contest recognition ceremony at the state capitol on Arbor Day. My student will have fond memories of the day, as I will. Thank-you for all the materials that were given me. They will be read and put to good use. As a matter of fact, I just finished up with my LEAF workshop and found it to be so worthwhile.

I did follow up on the planting of her tree. She received coverage in three local newspapers, as well as the local NBC TV news. Appreciation was noted in all the media coverage for the donated tree and the local nursery which kindly volunteered the labor.

The writing contest is a wonderful chance for 4th graders to express interest in our forests. I am looking forward to it again next year!" -- J. Miazga, Three Lakes District



Tessa Jilot Associate Forest Resource Educator **Division of Forestry**



2008 Forest Appreciation Week Writing Contest



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Contest Requirements:

- **¥** Fourth Grade Students Only
- 🗱 Submit only one (1) entry per classroom
- Any written form, including essay, poetry, or other type of creative writing is acceptable. The entry must be 200 words or less and follow the theme: *My Favorite Forest Animal.*
- Writing must be the original work of a student currently in fourth grade.
- A participant report form must be attached to your classroom entry. Your classroom entry must be sent to the designated judging team coordinator listed in this contest packet on page 25.
- Entries must be postmarked by March 7, 2008. Contest entries will not be returned and become property of the contest sponsor.
- Judging Criteria Theme Application 60%, Originality 30%, Presentation 10%
- A semi-finalist will be chosen from each CESA District and their essays will appear in the 2009 Arbor Day-Earth Day Calendar and on the WDNR website EEK! Environmental Education for Kids.
- A panel of judges from the Department of Natural Resources will review the 12 semi-finalists and select the top three state winners.

Contest Prizes and Recognition:

- The three state winners and their teachers will be recognized for their achievement. The students will be presented with a savings bond of \$100, \$75, and \$50, respectively. The Wisconsin Woodland Owners Association donates the awards. The students will also receive a landscape tree to be planted at their school or in their community, donated by the Wisconsin Nursery Association.
- Teachers of the three state winners will receive scholarships for a Learning, Experiences & Activities in Forestry (LEAF) workshop and a Project Learning Tree (PLT) workshop, plus additional classroom supplies.
- Parents, students, and teachers will be honored at a special celebration in our State Capitol.

Teachers: On the next few pages you'll find activities and additional information that may assist you with this year's contest. Have fun and enjoy!

Celebrate Our Tree and Forest Resources

Earth Day - Sunday - April 22 Arbor Day - Friday - April 25 Forest Appreciation Week April 20 - 26

Teachers Win Too!

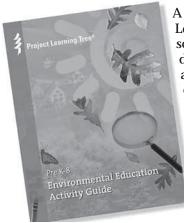


Teachers of the three state writing contest winners receive a FREE LEAF workshop. In addition, teachers can earn one graduate level credit from the University of Wisconsin-Stevens Point at no cost for attending the workshop (over \$300 value). LEAF workshops are held throughout the year in many locations around the state.



Workshop participants are introduced to Wisconsin forest-related concepts, teaching techniques, and classroom/ field materials. Everyone goes home with a LEAF Lesson Guide designed to fit smoothly into their curriculum. The comprehensive Lesson Guide is correlated with Wisconsin's Model Academic Standards and features interdisciplinary classroom lessons, forestry career spotlights, and field enhancements for outdoor learning.

The Urban Forest Benefits activity in this booklet is modified from the K-4th grade unit of the LEAF Urban Forest Lesson Guide.



A FREE Wisconsin Project
Learning Tree (PLT)
scholarship for professional
development will be
awarded to the teachers
of the three 4th grade
writing contest winners.

PLT is an award winning environmental education program for educators and students in Pre-Kindergarten through 12th Grade. This education program has

been used in Wisconsin and nationally for over 30 years and teaches students how to think, not what to think, about the environment. Students learn environmental content that correlates to national and state standards in science, social studies, language arts, math, and other subjects – and strengthen their critical thinking, team building, and problem solving skills.

Project Learning Tree is correlated to the Wisconsin Model Academic Standards and each workshop includes Wisconsin based resources to use in your classroom.

The Web of Life activity in this booklet is a sample of the variety of lessons offered in the Project Learning Tree Pre K-8 Environmental Education Activity Guide.

Make Tracks To

Wildlife Resources for Students and Teachers EEK! Environmental Education for Kids – Critter Corner http://dnr.wi.gov/org/caer/ce/eek/critter/index.htm Learn all about native and invasive wildlife in Wisconsin

Smithsonian Institution – North American Mammals http://www.mnh.si.edu/mna/ Searchable database of all living mammals in North America

Wild Wisconsin Web

http://www.wildwisconsinweb.com/ A question/answer site for those interested in nature, wildlife viewing, and the outdoors

American Museum of Natural History's "Ology" Site http://ology.amnh.org/biodiversity/ Interactive links and information on natural history for kids

Cornell Lab of Ornithology

http://www.birds.cornell.edu/ Learn all about birds with the interactive online guide http://www.bird.cornell.edu/programs/urbanbirds/ Urban bird information and studies



http://bugguide.net/node/view/15740 Guide to insects and spiders and resources to identify bugs

Journey North

http://www.learner.org/jnorth
Find migration maps, pictures, standards-based lesson
plans, activities, and information to help students make
local observations and fit them into a global context

Minnesota Conservation Volunteer: Young Naturalist
http://www.dnr.state.mn.us/young_naturalists/index.html
Online natural history articles for youth (can be adapted to Wisconsin) as well as correlating teachers guides

Wisconsin Nature Mapping
http://www.wisnatmap.org/
A biodiversity survey program
that allows citizens, school
groups, and professionals
to enter wildlife
observations into a
statewide database



First Place 2007 - Smokey Says "Be Careful with All Outdoor Fires"



₩ildfire Prevention < < < >

by Caitlyn Kozik

Always use caution in the forest you admire

Be careful to prevent an outdoor fire

Campfires are fun but always put them out

Danger rises when there is a drought

Everyone is responsible for fire prevention

Fire safety demands all our attention

Grass fires usually like to scamper

Help by being a careful camper

nformation is the best education

 ${\sf J}$ oin Smokey in celebration

Keep the forest fire free

Lightning often strikes a tree

Matches should never be dropped

Nature's storms can't be stopped

Oxygen keeps a fire burning

Prevention requires learning

Quick response to a fire best

Rescue workers do the rest

 S mokey says if you start a fire, put it out

eaching safety is what it's all about

Uncontrolled fires can lead to disaster

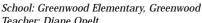
Vegetation usually burns faster

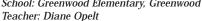
Wildfires can't be forsaken

X-treme caution must be taken

You can prevent forest fires

Zeroing in on prevention is all it requires







Inspirational thoughts from a past student winner



The Mystery Animal



by Beth Ascher, Lakeview Elementary School, Sparta

You're my favorite insect You're thin and skinny You have six legs But wings not any. You look like a branch Or a twig of a tree. You're camouflage is so good You always fool me. You feed on plants And the leaves of trees And can eat too much 'Til the tree's not healthy. When you're found in the tropics You're the largest one known, You measure 13 inches My, how you've grown! I'd like to be you, When I play hide and seek 'Cuz I'd never be found, Not even after a week. Yes you're my favorite insect My number one pick Diapheromera femorata Or, a walking stick.



Cool Stuff!

Listen to 1999 Second Place winner Beth Ascher read about her favorite forest animal on *EEK!*, Wisconsin DNR's Environmental Education for Kids website. Beth's poem was featured on an episode of *Into the Outdoors* in 2003. Find it at www.dnr.wi.gov/eek/cool/walkingstick.htm

Please share this link with your students. It's a great way to inspire them to share their own creative thoughts about Wisconsin's forest wildlife!



Wisconsin's Wonderful Wildlif

Wisconsin is nicknamed the Badger State because lead miners in the 1800s tunneled deep into hillsides, just like badgers do when they build their dens. Check out some of the other state animals:

Bird: American Robin

Wildlife Animal: White-tailed Deer

Fish: Muskellunge (Musky)

Insect: Honey Bee

See how many of these animals you can find next time you are outdoors!

Interactive "Wisconsin's Forest Wildlife" poster available online! Check it out: http://dnr.wi.gov/ org/caer/ce/eek/nature/habitat/forest1.htm

Corner

Animals are funny, too! Share these wacky wildlife jokes with your family and friends.

Which fish can perform operations? Sturgeon!

What does a bee chew? Bumble gum!

Why do hummingbirds hum? They don't know the words.



Why is a fish easy to weigh? Because it has it's own scales!

on Baby!



Read the clues below and fill in the blanks with the name of each animal's young. Once you have completed each answer, take the circled letters and insert them below to reveal a fun fact about the bald eagle.

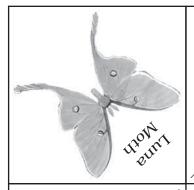
- 35 pounds when it is born!
- 2. Bald eagle young, which are often known as OO ___ I ___ s , don't develop white feathers on their head until they are four years old.
- 3. The little brown bat gives birth to one ___ u __ which learns to fly when it is iust three weeks old.
- 4. Even though a skunk ___ _ _ _ _ _ is born blind, it already has distinct black and white markings.
- 5. Most birds lay more than one egg in their nest, and this is known as a ___ <u>t c O</u>
- 6. The opposum may give birth to 20 kits at a time and have up to two I each year. That's a lot of young!
- 7. Black bear ___ b O are usually born in sets of twins in January or Feburary.

The bald eagle, named our nation's symbol in 1782, weighs about 7 to 15 pounds and can have more than 7,000

Teacher Tip:

As part of the 2007 Forest Appreciation Week Writing Contest, all participating teachers received a free copy of Critters of Wisconsin - Pocket Guide. You may find this book useful as students complete the activity pages. Answers to the Wisconsin Forest Wildlife Quizzer may also be found in this guide. While supplies last . . . interested teachers can request a copy of this book. Email: tessa.jilot@wisconsin.gov

Answers to 'Oh Baby!' found on page 26



A. The female is slightly larger than the male.

vater for 15 minutes?

A. American beaver

hold its breath under

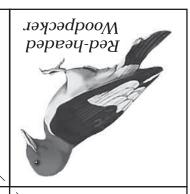
rees a year and car

Name three foods ' that a bobcat likes to eat.

A. Rabbits, mice, / squirrels, mink, muskrat, skunk, fox, porcupine, birds, bats, snakes, frogs, carrion (dead animals)

This Wisconsin animal gets its name from a certain body part, which it raises like a flag when alarmed.

A. White-tailed deer



Wisconsin Forest Wildlife Quizzer

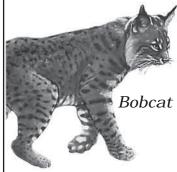


Artist Kandis Elliot. Printed with permission from Defenders of Wildlife.

help them walk in deep snow (just like snowshoes help us). the snowshoe hare get its name? Its large back feet A. American robin

throughout Wisconsin, this is our state bird.

Commonly



animal can chew

A. Bald eagle

.587 I ni lodmys ресоше опі изцои з wild turkey to әүт то теәд D'id sidT

Step 3

000,08 .A

. U

> porcupine have on its body? e soob slliup ynem wod pointed hairs. About are actually hard, slliup s'əniq -uəroq A



Step 1 6

Color photos and cut around outside border to make your paper square.

Step 2

Start on plain side. Fold outside corners in to the middle along dotted lines, so animals show.



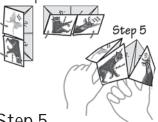
Step 3

Turn square over. Fold new outside corners in to the middle.

Step 4

Fold top edge to bottom edge. Crease along middle. Open back up. Fold one side to other side. Crease along middle. Open back up.





Step 5

Turn square over. Put your thumbs and pointer fingers into the four pockets on back. Do you see Wisconsin's wildlife? You're ready to play the game!

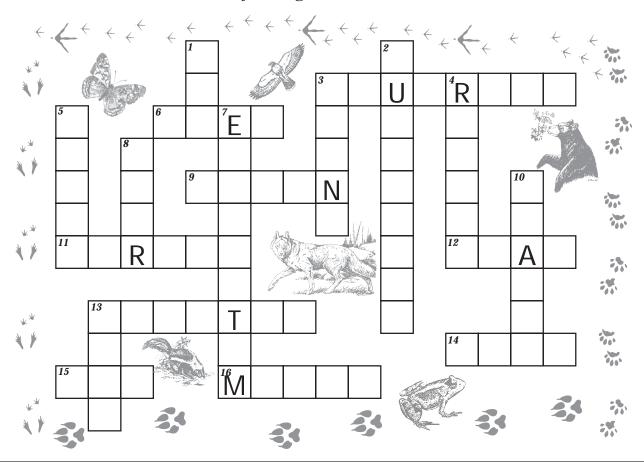
How to play:

- 1. Have a friend select an animal from the Forest Wildlife Quizzer and count the number of letters in its name. Open and close the Quizzer that number of times.
- 2. Have the player pick one of the numbers showing. Open and close the Quizzer that number of times. Open another number and give the quiz!

My Favorite Forest Animal Crossword <€



See if you can find the words in this crossword puzzle. Look for animals that you might find in the forests of Wisconsin.



Down

- 1 If you like honey, you'll love this animal that makes it.
- 2 This animal uses its long curly tongue to sip nectar from flowers
- 3 This can be a smelly Wisconsin forest creature when defending itself.
- 4 You might see this gray animal in your back yard nibbling on grass. It has ears that stand straight up and shift like a satellite dish to catch sounds from all directions.
- 5 You'll find this type of fish swimming in a forest stream. Their common name might include rainbow, brown, and brook.
- 7 A system of living and non-living organisms that interact with each other.
- 8 This omnivore (eats meat and veggies) scratches its back with the trunk of a tree, is an excellent climber, and loves bee larvae and honey.
- 10 This sneaky little animal can be very temperamental especially when hunting for prey twice its size.
- 13 This Wisconsin animal has excellent eyesight and soars above their prey before swooping down to catch them.

Across

- 3 This animal can jump gracefully from tree to tree collecting acorns to cache (store) for the long winter
- 6 This animal has as a white tail and eats buds off of trees.
- 9 Our state bird and one of the first we look for during springtime.
- 11 This animal says, gobble, gobble, gobble.
- 12 You might find this warty skinned animal hopping along the forest floor
- 13 A home for animals with space, shelter and food.
- 14 This animal could be mistaken for a coyote, but has longer legs. It enjoys a good howl at the moon and hunts in packs.
- 15 A nocturnal (awake at night) animal that catches mice during the night.
- 16 This animal is Wisconsin's state fish and a member of the pike family. It's usually known as the "fish that got away" because they're so hard to catch.

See answers on page 26.

EAF Urban Forest Lesson Guide



Wisconsin's urban forests a very important resource. However, many Wisconsin residents don't recognize the benefits urban forests provide. LEAF has developed supplemental lesson materials to their LEAF Forestry Education Lesson Guide to address the subject of urban forests.

The Wisconsin K-12 Urban Forest Lesson Guide helps Wisconsin teachers educate students about the value of and need for our urban forests. Additionally, the Urban Forest Lesson Guide can help teachers in urban areas teach the importance of forests in general by using familiar urban forest surroundings to engage students and ultimately make the LEAF Wisconsin K-12 Forestry Lesson Guide units more effective.

Guide Highlights

- ₹ 3-4 age appropriate lessons per grade level unit (K-4, 5-8, 9-12)
- Uses teaching strategies to meet multiple intelligences
- On-line resources
- Can stand alone or be used in conjunction with other LEAF materials

K-4

Lesson 1 What's an uban forest?

In this lesson, students name places in their town where trees grow. They search for living and nonliving things in their classroom and schoolyard. Students use an Urban Forest Memory card game to learn how living and nonliving things interact. They write a story or draw a picture to describe the life of a raindrop in their town. Finally they review what they have learned by comparing similarities and differences between urban and rural forest ecosystems.

Lesson 2 Urban forest benefits

In this lesson, students listen to a story then either draw a picture or write a new story about the benefits of trees and differing points of view about trees. Students then create a rhyme or song about how trees make them feel. Finally, students consider how trees in rural forests are beneficial by comparing illustrations representing a tree in an urban forest and a tree in a rural forest.

Lesson 3 Taking care of urban forests In this lesson, students explore the reasons for urban forest management through an interactive board game. They then consider if those same problems and solutions can be applied to rural forests.

Lesson 4 Urban forest stewardship In this lesson, students learn about the meaning of the word "steward" and discuss choices they would make in given situations. They learn about the people who influence urban forests through an Old Maid type card game. They also create their own knight's shield that shows why urban forests are important and what they can do to help them.

Lesson 1 Urban forest connections

In this lesson, students combine their own knowledge with information from dictionaries to define "urban forest" and "ecosystem." They relate their school to an ecosystem and then create a web diagram to show the connections that parts of urban forests have.

They extend that idea to the connections urban forests have to other ecosystems using the water cycle as an example. To conclude, students write a few paragraphs to describe urban forest ecosystems and rural forest ecosystems, how they are similar, how they are different, and the degree of both.

Lesson 2 Urban forest benefits

In this lesson, students participate in "Name that Benefit" to identify some of the benefits urban forests can provide. They also examine two different pictures and decide which matches various statements about urban forest benefits. To conclude, students list urban forest benefits and how the benefits also help people and ecosystems beyond the urban forest.

Lesson 3 Management decisions and biodiversity

In this lesson, students participate in a group discussion that defines urban forest management and how different situations require different management. Students then learn about the impact of biodiversity on an urban forest using a map-reading and datamanipulation exercise. Students learn about potential management problems caused by invasive species and plot where exotic species come from on a world map. Finally, students present their opinions to the class in a group presentation explaining if and how the problems of urban forests are problems in rural forests.

Lesson 4 Stewardship close to home In this lesson, students learn what it means to be a steward, and participate in an exercise to illustrate the importance of team work in successful stewardship. They alsowork in groups to read and report on organizations and programs in Wisconsin that are working to help improve urban forests. Students brainstorm things they could do to be good stewards. To conclude, students do a web search to learn about other forest stewardship organizations that address other forest concerns.

9-12

Lesson 1 What's it worth?

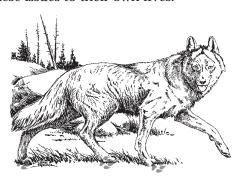
In this lesson, students review what urban forests and ecosystems are. They analyze data about the benefits and costs of maintaining trees in urban forests and fill out a worksheet. Then, in small groups, students read and discuss summaries of research about the benefits to humans from a social perspective. Finally, the class discusses which of the benefits they learned about may relate to rural forests.

Lesson 2 Working together

In this lesson, students describe their perception of management. Using an interactive game show activity, they learn about forest management techniques. In a role-play activity, students learn how homeowners, business owners, and city foresters can work together to avoid conflict. Students then consider how the conflicts they encountered may impact rural forests.

Lesson 3 Issues and action

In this lesson, students discuss the meaning of stewardship. They investigate an urban forest issue through a WebQuest. Students then create an action plan for addressing that issue in their own community. Finally, students use a Venn diagram to illustrate the overlap that issues have between urban and rural forests and evaluate the relevance of these issues to their own lives.

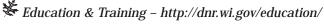


Make Tracks To

Forestry and DNR-Related Resources for Students and Teachers

Wisconsin Department of Natural Resources http://dnr.wi.gov

* Invasive Species – http://dnr.wi.gov/invasives/



- Teacher Workshops http://dnr.wi.gov/ org/caer/ce/eek/teacher/calendar.htm
- Project Learning Tree http://dnr. wi.gov/org/caer/ce/pltwild/plt.htm
- Education Connection publication order form http:// dnr.wi.gov/education/PDF/EducationConnection.pdf
- Wildcard Activity Guide http://dnr.wi.gov/ org/caer/ce/eek/teacher/wildcardguide.htm
- Adult Education and Training http://dnr. wi.gov/org/caer/ce/news/workshops.htm

EEK! Environmental Education for Kids – http:// dnr.wi.gov/org/caer/ce/eek/teacher/

- Why I Decided to Become a Forester http:// dnr.wi.gov/org/caer/ce/eek/job/forester.htm
- Interactive 'Wisconsin's Forest Wildlife' poster http:// dnr.wi.gov/org/caer/ce/eek/nature/habitat/forest1.htm

₩ Where You Live – http://dnr.wi.gov/whereulive/

- Gateway to Basins http://dnr.wi.gov/org/gmu/gmu.html
- Ecological Landscapes http://dnr.wi.gov/landscapes/

Division of Forestry http://dnr.wi.gov/forestry

*Tree and Shrub ID – http://dnr.wi.gov/forestry/treeid/

Media -

- Publications http://dnr.wi.gov/forestry/publications
- Videos/Webcasts http://dnr.wi.gov/ forestry/Publications/VideosWebcasts/

Buy Tree Seedlings – http://dnr.wi.gov/ forestry/Nursery/Order/index.htm

* Arbor Day Celebration Ideas – http://dnr. wi.gov/forestry/arborday.htm

Forest Insects and Diseases – http://dnr.wi.gov/forestry/fh

 ${\it Wisconsin Forestry.org}$

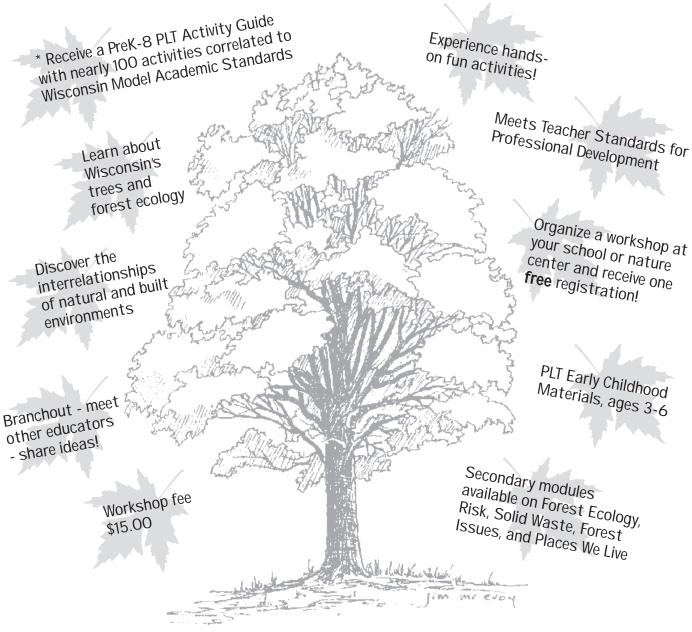
http://www.wisconsinforestry.org/

Education Calendar – http://www. wisconsinforestry.org/calendar.php

Books – http://www.wisconsinforestry.org/teachers.php

Project Learning Tree (PLT) <</p>

An award-winning environmental education program for PreK-8 formal and non-formal educators. Go out on a limb . . . attend a workshop!



*Correlations available on the DNR website at http://www.dnr.wi.gov/education/pltwildwet Click on Project Learning Tree, then Educational Resources



WDNR - PLT/WILD/WET

101 S. Webster St. Madison, WI 53707-7921 Phone: 608-264-6280 E-mail: dnrpltwildwet@wisconsin.gov http://dnr.wi.gov/education/pltwildwet







Web of Life

45

By conducting research and simulating a food web, students will take a close look at a forest ecosystem and discover ways that plants and animals are connected to each other. While this activity focuses on forests, you can also use it to study other ecosystems, such as oceans, deserts, marshes, or prairies by substituting the appropriate information.

Levels

Grades 4-8

Subjects

Science, Language Arts, Visual Arts

Concepts

Plant and animal populations exhibit interrelated cycles of growth and decline. (3.2) Ecosystems possess measurable indicators of environmental health. (3.4)

Skills

Researching, Discussing, Identifying Relationships and Patterns, Predicting



Technology Connections

Graphics Software, Internet Resources

Materials

A ball of string or yarn, resource materials about forest plants and animals, folders (optional)

Time Consideration

Preparation: 30 minutes Activity: two 50-minute periods

Related Activities

schoolyard Safari; Field, Forest, and Stream; Are Vacant Lots Vacant?; Planet Diversity; Dynamic Duos

OBJECTIVE

Students will understand that ecosystems are made up of interdependent organisms and other components.

ASSESSMENT OPPORTUNITIES

- Have students select a local bird, fish, reptile, amphibian, or mammal, and find organisms it depends on and organisms that depend on it.
- Have students write about a local invasive species (plant or animal) that is causing a negative impact on the local environment. Have them research to find when and how the organism came to the area, what problems have been created by its being there, and what is being done to control it.

BACKGROUND

A forest is a complex living system. While its appearance is often dominated by trees, a healthy forest is composed of many different animals and plants that interact with and depend on each other.

One way that forest plants and animals are connected is through the energy from food. A primary function of a forest, like any other ecosystem, is to produce and distribute energy. All life depends on the ability of green plants to use sunlight to synthesize simple sugars from carbon dioxide and water. Through this process, called *photosynthesis*, plants take energy from sunlight and make it available to animals. Plant eaters, or herbivores, eat the plants directly; animal or flesh eaters, carnivores, in turn eat herbivores or other carnivores, thus forming a *food chain*.

A food chain is a simplified way of showing energy relationships between plants and animals in an ecosystem. For example, a food chain of sun*plant seed*/mouse*owl shows that a seed is eaten by a mouse, which in turn is eaten by an owl. However, in reality it is rare for an animal to eat only one type of food. A food web describes the interconnection of the food chains in an ecosystem and

gives a clearer picture of how plants and animals in an ecosystem are related to each other.

Plants and animals are interdependent in other ways besides food. For example, plants may depend on animals for pollinating flowers, dispersing seeds, and keeping insect populations in check. And animals may depend on plants for shelter and to help modulate the amount of moisture and sunlight in their environment.

In this activity, students will create a "web of life" to show how all living things are connected to others. No matter how unrelated organisms may seem, they are, in fact, connected.

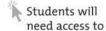
GETTING READY

(Optional) For each student, begin a folder of information on a specific forest animal or plant. Folders might include pictures you cut from magazines or calendars, and articles or other information you glean from nature journals or other sources. If possible, select a variety of plants and animals so folders include at least two of each type: mammal, arthropod (insect or spider), bird, reptile, amphibian, trees, and other plants.

Animal possibilities include bark beetle,

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bat, beaver, bear, box turtle, butterfly, chipmunk, deer, earthworm, field mouse, red fox, tree frog, grasshopper, king snake, lizard, mosquito, hawk moth, opossum, barred owl, rabbit, raccoon, skunk, snail, red squirrel, tick, or woodpecker. Plant possibilities include azalea, clover, columbine, cottonwood, honeysuckle, lichen, maple tree, Douglas fir, paintbrush, pine tree, poison ivy, shelf fungus, or violet.



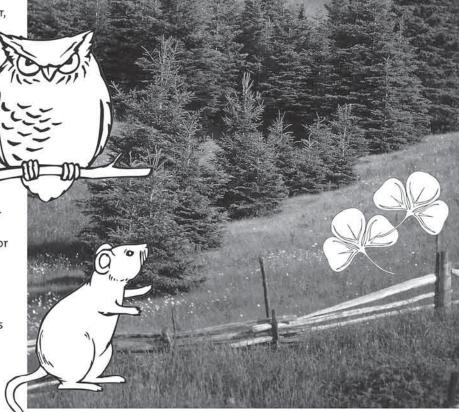
resource materials or the Internet for information about forest plants and animals. Arrange time in the library or media center.

DOING THE ACTIVITY

- 1. Ask students to work in pairs or teams to brainstorm all the components they think would be necessary for a healthy forest. Invite them to share their ideas with the rest of the class.
- 2. Have each student select a forest organism to study. (Or choose one of the folders prepared earlier.) Make sure the students select a variety of plants and animals, including mammals, insects, birds, reptiles, trees, and other plants.
- Instruct students to collect the following information about their chosen organism.

For Animals:

- Where within the forest does this animal live?
- What does this animal eat?
- What animals prey on it?
- What other animals and plants live in the forest with this animal?
- In what ways does this animal depend on these other animals and plants?
- How does the animal influence its environment?



For Plants:

- Where within the forest does this plant live?
- What animals eat this plant?
- What other plants and animals live in the forest with this plant?
- How does this plant depend on these other plants and animals?
- How does this plant influence its environment?
- 4. After students have completed their research, have them make a nametag for their forest plant or animal, including a picture. Have students sit on the floor in a circle with their nametag. Introduce the web of life concept (see Background).
- 5. Starting with one "plant," ask that student to hold the end of a ball of string, and to name another organism in the circle with which that plant interacts (for example, is eaten by or depends on). Pass the ball to this second student. Ask the second student to name another organism with which his or her organism interacts. This process will continue until each "organism" is linked to the ecosystem, and the ball is returned to the first student.
- 6. Now, have students slide back until the string is taut. Tell students to keep still. But if they feel a tug, they should tug in response. When everyone is still, tell the student holding the original end of the string to gently begin tugging. Keep reminding everyone that if they feel a tug, they should tug in response. Through this mechanism,



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vibration will spread through the food web until everyone is tugging and the whole web is shaking.

- 7. Ask students how the tugging demonstration might illustrate what happens when one of the links in an ecosystem is damaged through natural or human-made stress. (The rest of the ecosystem feels the effects.)
- 8. Ask students to pick one organism that seems less important than the others, and have it drop out of the web. Ask if any other organisms should drop out because they depended on that organism. After one or more have dropped out, ask the students again to identify an organism that seems less important, and repeat the procedure. Continue playing for a few more rounds; then ask the following questions:
- What happens when we remove a link in the forest ecosystem? (Organisms that depend on it are affected. The web itself changes shape.)
- Were the changes more dramatic when the system was composed of many parts or when it had fewer parts? (fewer)
- What can we say about the relationship between how many parts the system has (its complexity or diversi-

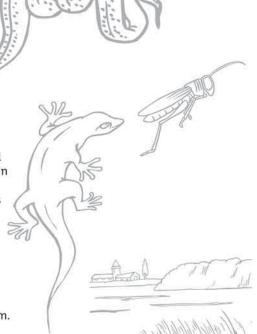
ty) and how stable it is? (In general, complexity makes it more stable.)

What would happen if humans were introduced to the web?

Enrichment

- Have students use concept mapping or graphics software to illustrate the web of life using plants and animals the students studied in the activity.
- Help students create a forest mural showing the "web of life." Have them draw hills, valleys, streams, and other features on sheets of cardboard or poster paper and then add photos or drawings of the organisms they studied in the activity. By placing a push pin next to each plant or animal, they can use yarn to connect organisms to other animals and plants with which the organisms directly interact.
- Make food web mobiles. Have each student select a plant or animal that is part of the forest ecosystem or another ecosystem. Students should research their

organism's place in the food web and make a cutout of all the food web organisms from construction paper and colored markers. Using a clothes hanger and thread to hang cutouts in the proper arrangement, students can construct a mobile that represents their food web.



READING CONNECTIONS

Carrighan, Sally. One Day on Beetle Rock.
Heyday Books. 2002. In the setting of
Sequoia National Park, the story describes
the lives of the animals that live under and
around a granite outcropping. Readers gain
a sense of being right there observing the
interactions between predator and prey.
Grades 4-8. ISBN: 1890771538. 暫

Cherry, Lynne. The Great Kapok Tree: A Tale of the Amazon Rain Forest. Harcourt. 1990. This inspired look at what the Kapok tree means to the creatures that live in it, and what rain forests mean to the world's ecology, was at the forefront of the ecological movement ten years ago and continues to resonate profoundly with children everywhere.
Grades 4+. ISBN: 0152026142. 更

Mason, Cherie. Everybody's Somebody's Lunch.
Tilbury House. 2002. A young girl learns
about predators and prey in the animal
world when her cat, Mouser, is killed by a
coyote. Grades 2-6. ISBN: 0884481980.

Reed-Jones, Carol. The Tree in the Ancient Forest.

Dawn Publications. 1995. The story of an old fir tree and the remarkable web of plants and animals living around it. Beautifully illustrated. Grades 3-6. ISBN: 1883220319.

Relf, Patricia. Magic School Bus Gets Eaten: A Book About Food Chains. Scholastic. 1996. A forgotten assignment, a soggy shoe, and a tuna fish sandwich set the scene for another Magic School Bus adventure, as Arnold and Keesha travel to the depths of the ocean and end up in the belly of a tuna. Their excursion teaches them about the food chain. Grades K-4. ISBN: 0590484141.

Smith, Howard. Small Worlds: Communities of Living Things. Scribner. 1987. Describes a number of small self-contained communities, including a sand dune, tidal pool, old barn, and vacant lot, and examines the ways in which the plants and animals interact. Grades 4+. ISBN: 068418723X.

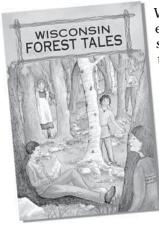
Available @ http://shop.plt.org



Web of life Wisconsin Model Academic Standards

Students will 1. collect information about various organisms in an ecosystem, 2. create a mural that depicts the interdependence of various organisms with other components in an ecosystem, and 3. create a simulated web of life using a ball of string; Grades 4 - 8; English Language Arts, Environmental Education, Science. **ELA**: F.4.1, F.8.1 **EE**: B.4.4, B.8.8 **S**: F.4.1, F.4.2, F.4.4, F.8.9

Free Book Teaches Wisconsin Forest History



Would you like a fun and engaging way for your students to learn about the history of Wisconsin's forests? Wisconsin Forest Tales, a collection of eight historical fiction stories, is a useful tool to help teach Wisconsin history and boost reading skills. The book is available at no cost to 4th grade teachers in Wisconsin. It was written in 2004 by local author Julia Pferdehirt with funding

from the Wisconsin Environmental Education Board, the Wisconsin Department of Natural Resources. and LEAF, Wisconsin's K-12 forestry curriculum.

If you are a Wisconsin 4th grade teacher and have not already received one, please request a Wisconsin Forest Tales kit by sending an email to leaf@uwsp.edu with your name, the name of your school, and the school's shipping address (for UPS delivery). Each classroom kit includes:

*One copy of the book, Wisconsin Forest Tales

🏅 A guide book with a related classroom activity for each story

A Wisconsin Forest Tales poster

👺 A CD

A "Trees are Tremendous" video

The CD included in the kit features topic-related songs (and words so your students can sing along) by Wisconsin musicians Stuart Stotts and Ken Lonnquist, a reader's theater script written by the author to accompany each story in the book, the entire book (each story is included as a PDF file for you to print as many copies as needed for your class), and various other resources.

An electronic copy of the book, the reader's theater scripts, and the activity guide are also available online at http://wisconsinforestry. org/webtemplate.php?linkname=wiforesttales

LEAF also has a limited supply of free sets of books for Wisconsin classrooms. To request a set of books, send an email to leaf@uwsp.edu.

Three sets (25 copies each) of the books are also available for checkout from the Wisconsin Center for Environmental Education Resources Library at UW-Stevens Point. Contact them at (715) 346-4854 or online at http://www. uwsp.edu/cnr/wcee/library/index.htm

Teachers with access to school or public libraries in the Wisconsin Library Delivery System Network (http://psw.scls.lib.wi.us/delivery/networks/networks. html) can borrow these books up to four weeks.

Make Tracks To . . . ***

Education and Activity Ideas for Teachers LEAF (Learning, Experiences, & Activities in Forestry)

http://www.leafprogram.org

For Educators - http://www.uwsp.edu/cnr/leaf/educators/ Provides information on professional development, LEAF lesson guides, supplemental resources, and other educator opportunities

For Students - http://www.uwsp.edu/cnr/leaf/students/ Provides information on identifying trees, the importance of urban forests, and wildland fires

Project Learning Tree (PLT)

http://dnr.wi.gov/org/caer/ce/pltwild/plt.htm Offers information for teachers on PLT workshops and other educational resources, plus a free sample of a PLT lesson; information on workshops for Project WILD and Project WET

Other Resources:

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Green Hour - http://www.greenhour.org Ideas to help children discover the wonders of nature

Peterson Journal for Teachers - http://www.enaturalist. org/pjt.php Online journal articles on a variety of nature topics and activity ideas

Nature Net - http://www.naturenet.com Variety of links for educators to different activity ideas on nature topics







LEAF is a partnership program between Wisconsin Department of Natural Resources -Division of Forestry

and

Wisconsin Center for Environmental Education College of Natural Resources University of Wisconsin-Stevens Point.

Urban Forest Benefits

This lesson is modified from the LEAF K-12 Urban Forest Lesson Guide, K-4th Grade Lesson 2. Discover more about LEAF at www.uwsp.edu/cnr/leaf



Nutshell

In this lesson, students listen to a story, then write a new story about the benefits of trees and differing points of view about trees. Students then create a rhyme or song about how trees make them feel. Finally, students consider how trees in rural forests are beneficial by comparing illustrations representing a tree in an urban forest and a tree in a rural forest.

Big Ideas

- The tree canopy retains stormwater, reduces heat island effects, absorbs pollutants, and provides wildlife habitat. These benefits are important and quantifiable.
- Urban forests affect the physical and psychological health of human residents.

Objectives

Upon completion of this lesson, students will be able to:

- Name an animal that trees provide habitat for.
- **Give** an example of how shade can be beneficial.
- **Explain** that trees absorb pollutants.
- **Describe** how an urban forest might affect the way people feel.

Subject Areas

Arts, Language Arts, Science, Social Studies

Lesson/activity time

- *Total Lesson Time: 120 minutes
- Time Breakdown:

Introduction	10 minutes
Activity 1	40 minutes
Activity 2	50 minutes
Conclusion	20 minutes

Teaching Site

Classroom

Background

Urban forests provide us with a variety of benefits. The benefits may be provided by individual trees, but the impact of the entire tree canopy in an area is what is measurable. The tree canopy is the leaves and branches of a tree or group of trees. It slows rain during storms, which reduces the number of gallons of stormwater that need to be handled by stormwater treatment facilities. That also means less water flows across the ground picking up pollutants along the way. For the purpose of this lesson for K-4 students, the individual trees are the focus.

Trees provide habitat for wildlife by furnishing shelter and food. The sounds of traffic and other noises are reduced by the leaves of plants. Sound waves are absorbed by trees instead of bouncing off, as they do with hard surfaces. Trees are especially good at reducing higher-pitched sounds that are most troubling to people. Trees also help screen views to prevent us from seeing things we'd rather not.

Areas shaded by trees are cooler than those in the sun. That shade can help reduce the cost of cooling our homes because we use less energy. Because we use less energy, less pollution is created from the energy source. In addition, when cars sit in the sun, gasoline is heated and can vaporize from leaky gas tanks and hoses. These hydrocarbon emissions cause smog. Cooling the air a few degrees using the shade of trees can have a big positive impact.

Tree leaves can actually collect small particles of pollutants from the air and tree roots absorb pollutants in water and hold it in the wood of the tree. Particulate pollution such as dust, pollen, ash, and smoke, can actually be trapped by the hairy or rough leaves, twigs, and bark. Some pollution is absorbed into the leaves. This pollution may be harmful to

the tree, especially in high concentrations but can also provide nutrients for the tree. Reduced pollution is a benefit to the health of people in communities as well as those outside of those communities.

Studies have shown that the "green" in a neighborhood actually encourages lower crime rates, increases the ability of girls to learn, helps children with Attention Deficit Disorder learn, and promotes positive interactions among residents of the area. That same green space also encourages neighbors to get outside where they can meet each other, fostering better community relationships. For the most part, trees influence our psychological and physical health in positive ways.

Materials List

For Each Student

- Copy of Student Page 2, Forest Tree Picture
- Copy of Student Page 3, Urban Tree Picture

For Each Pair Of Students

- *8.5" X 11" sheet of lined paper
- Copy of Student Page 1, Benefits and Drawbacks

For The Teacher

- Copy of "Why Not Cut it Down?" (found on page 19)
- Overhead transparency of Student Page 2 , Forest Tree Picture (optional)
- Overhead transparency of Student Page 3, **Urban Tree Picture (optional)**

Vocabulary

Benefits: Things that are good.

Drawbacks: Things that are not good.

Habitat: A place where a plant or animal can get the food, water, and shelter it needs to live.

Pollution: Things put into the environment that are harmful. Pollution can be things such as chemicals, dust, and litter.

Procedure

Introduction

Ask the class to name some jobs they do around their home or at school to help out. (Take out the garbage; help with dirty dishes; help pass out worksheets.) Tell students that trees have jobs, too, and in this lesson they'll learn about some of those jobs.

Activity 1 – Story Telling

- 1. Tell students that you are going to read a story to them. They should pay attention to how the story is written, because they will be assigned to write their own story in a similar fashion. Read the story on Page 19, Why Not Cut it Down? to the class.
- 2. When you have read the story to the class, lead a discussion about what animals were mentioned the story. (squirrel and robin) Ask students to brainstorm other animals they can think of that live in their community. (crows, pigeons, raccoons, deer, rabbits, ants, spiders, etc.)
- 3. Divide students into pairs. Pass out Student Page 1, Benefits and Drawbacks to each pair of students. Discuss the information on Student Page1, Benefits and Drawbacks, and give local examples as needed to help students understand. Explain that different property owners view things differently.
- 4. Tell students that each pair should write their own story. Just as in the story they heard, it should include a conversation between a property owner and a kid who have different view points. They should use the information on Student Page 1, Benefits and Drawbacks to decide who the property owner is, what drawbacks to the tree the property owner sees, and what benefits to the tree the kid sees. For the benefits, they should all write about animal habitats and can choose one additional benefit to write about. Their story, unlike the one you read, should also include a resolution. Stress that they need to write objectively about both view points, even if they don't agree personally.
- 5. When students have finished their stories, ask for volunteers to read their story aloud. Discuss the different scenarios and endings to the story. Discuss why students chose the components of the story they did. Discuss why the people in their stories had differing views of the situation.



Activity 2 - How Trees Make You Feel

- Remind students that the people they heard/wrote about in their stories had different opinions about trees. Ask students, in groups or singly, to create a rhyme or song about how they feel about the trees and/or urban forest in their community and how the trees and/or urban forest help their community.
- 2. Have students present their song or rhyme to the class.

Conclusion - Beyond The Urban Forest Remind students what an urban forest and a rural forest are, if needed, Pictures of urban and rural forests intended to aid in student discussion are available on the LEAF website. Go to www.uwsp.edu/leaf and navigate to the educator supplemental resources section. Show students Student Page 2, Forest Tree Picture, and Student Page 3, Urban Tree Picture. (Either project the images or hand out copies.) Ask them to point out things in each picture that are the same and things that are different. (The birds, person, squirrel, are the same. The number of trees, number of people, building, and car are different.) Ask if they think the trees are affecting the way the people feel. (Yes.) Summarize by discussing how the rural tree and urban tree are alike, and how they are different.



Why Not Cut It Down?

Marco walked past the video store whenever he went to see his friend Jackie. In front of the store was a tree. It was a tall tree with little leaves and flat brown pods that hung from it and fell on the ground every year. Marco and Jackie would pick up the pods and open them to find the small brown seeds inside. They were good to throw at each other because they didn't hurt much when they hit you. They noticed that the squirrels seemed to like the seeds too, only the squirrels ate the seeds instead of throwing them.

As Marco walked by one day, Mr. Montez, from the video store, came out with another man and said, "I'll let you know when I'm ready for you to remove the tree. Thanks for stopping."

As the other man drove away Marco looked at Mr. Montez and asked, "Mr.Montez, what did you mean, 'remove the tree'?"

Mr. Montez replied, "I'm going to have this tree cut down. It's causing me too many problems."

Marco didn't know how the tree could possibly be a problem since it had never caused him any trouble. "What kind of problems?" he asked.

Mr. Montez explained that the pods on the tree fell onto the sidewalk, and he had to sweep them off so no one hurt themselves walking on them. When the leaves fell off the tree in the fall, they got all over the sidewalk, and people's feet would track them into the store. "Those leaves also block my sign. I'm trying to run a business, and if people can't see the sign, they won't know the store is here," complained Mr. Montez.

Marco heard what Mr. Montez was saying, but he didn't think those were very good reasons for cutting the tree down. It's not like the tree was sick, or had a lot of dead branches. Didn't Mr. Montez know that trees are important? He tried to explain. "Mr. Montez, those leaves that block your sign also shade your store and the sidewalk and the street. Lots of people park in front of your store just because the shade helps keep their cars from getting as hot. If you cut it down, they may not come anywhere near your store. Then what good is your sign?"

Marco stopped for a moment to think of other reasons the tree should stay. He remembered one and said, "Where will the robins that build their nest in the tree every spring go? They raise their young here."

Mr. Montez looked a little confused. Why was this kid trying to convince him not to cut down the tree? What difference did it make to him?

Wisconsin Model Academic Standards Addressed

Agriculture E.4.1

Ecology/Environment

Standard is: Identify various plants and animals and the ways humans benefit from them.

Students identify the benefits humans receive from trees in an urban environment.

Environmental Education B.4.5

Knowledge of Environmental Processes and Systems: Energy and Ecosystems

Standard is: Describe natural and human-built ecosystems in Wisconsin.

Students tell a story either visually or with words to describe things in an urban environment and how they interact with each other.

Environmental Education C.4.4

Environmental Issue Investigation Skills

Standard is: Identify some of the decisions and actions related to the issue.

Students either draw an ending to an existing story resolving a difference of opinion, or create their own story about differing view points about trees including a resolution to the conflict.

Environmental Education C.4.5

Environmental Issue Investigation Skills

Standard is: Identify proposed solutions to the issue and discuss arguments for and against the issue.

Students either draw an ending to an existing story resolving a difference of opinion, or create their own story about differing view points about trees including a resolution to the conflict.

Language Arts A.4.1

Reading and Literature

Standard is: Use effective reading strategies to achieve their purposes in reading. Read aloud with age-appropriate fluency, accuracy, and expression.

Students read their story about the benefits and drawbacks of a tree to the class.

Language Arts B.4.1

Writing

Standard is: Create or produce writing to communicate with different audiences for a variety of purposes.

Students write a story about the benefits and drawbacks of a tree.

Language Arts B.4.2

Writing

Standard is: Plan, revise, edit, and publish clear and effective writing. Students write a story about the benefits and drawbacks of a tree.

Language Arts C.4.3

Oral Language

Standard is: Participate effectively in discussion.

Throughout the lesson students are asked to think about questions and participate in group discussion.

Social Studies E.4.7

The Behavioral Sciences: Individuals, Institutions, and Society

Standard is: Explain the reasons why individuals respond in different ways to a particular event and the ways in which interactions among individuals influence behavior.

Students discuss the characters in the story and the motivations for their opinions.

LEAF Links

The lessons described below are from the LEAF Wisconsin K-12 Forestry Education Lesson Guide.

The lessons relate in some way to this lesson from the Wisconsin K-12 Urban Forest Lesson Guide. Suggestions for extension, replacement, or enhanced use of the lessons are included.

Unit K-1, Lesson 3: My Favorite Forest Use

Students discover the value of forests by studying Tree Spy collages, playing the Through the Forest game, and singing a song.

Use K-1 Lesson 3 as it is written after you have taught Urban Forest Lesson Guide K-4 Lesson 2 to expand the idea of forest benefits and values.

Unit K-1, Lesson 5: Animals Need Forests Too Students find out what forests do for animals and play a game to search for basic needs.

Use K-1 Lesson 5 as it is written after you have used Urban Forest Lesson Guide K-4 Lesson 2 and K-1 Lesson 3 (described above) to expand the idea of forest benefits and values beyond human use.

*Unit 2-3, Lesson 4: Forests Are Important to Me!*Students explore forest values and discover what forest products come from Wisconsin using a checklist. Creative writing and an art project help students examine why they value forests.

Use 2-3 Lesson 4 as it is written after you have taught Urban Forest Lesson Guide K-4 Lesson 2 to focus specifically on products we get from forests. The products are mostly from rural forests, but some can be from urban forests. Many products are manufactured in urban areas.

Unit 4, Lesson 6: Forests Are Important to You and Me Students discover reasons why Wisconsin forests are important to our quality of life through guided imagery, brainstorming, and an interactive media presentation.

Use Unit 4 Lesson 6, Activity 1 after you have completed Urban Forest Lesson Guide K-4 Lesson 2 to overview the importance of forests.

Unit 4, Field Enhancement 2: Are Forests Important Today? Students find out why forests are ecologically, economically, and socially valuable by searching in a forest and playing scavenger hunt bingo.

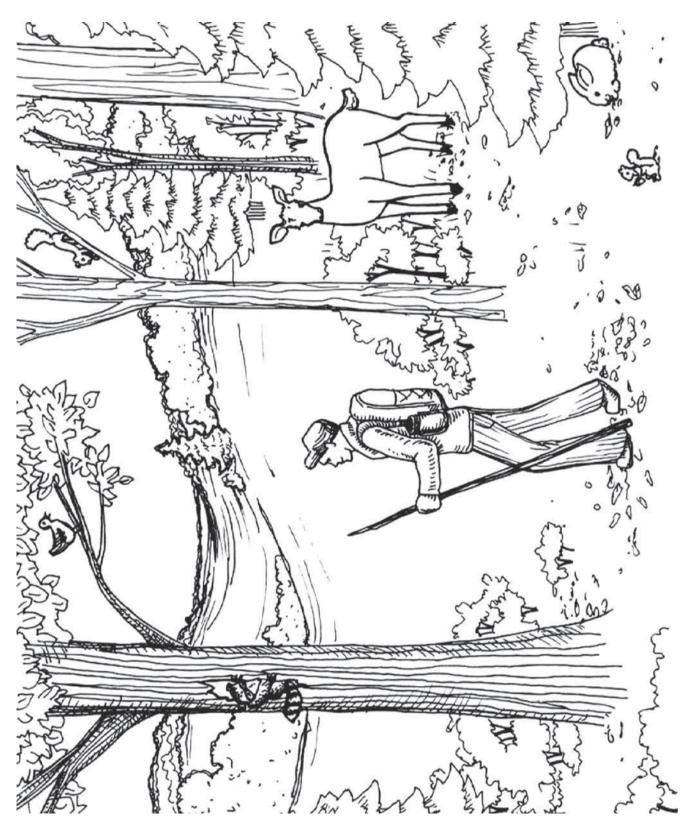
Use Unit 4 Field Enhancement 2 after you have completed all Urban Forest Lesson Guide K-4 Lessons. The field enhancement can be done in any wooded area or park with some modifications to the bingo cards. Replace images on the cards that do not apply to your area. Likely this will be in the social value column.

Benefits And Drawbacks

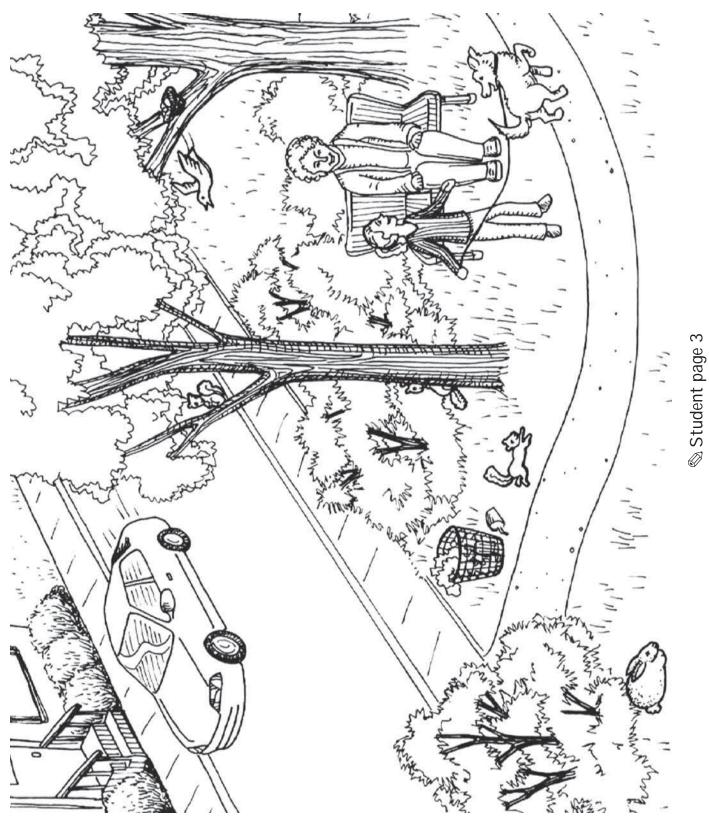
Property Owner (Choose One) Homeowner Storeowner	Benefits Of Trees (Choose One Or More From Kid's Point-of-view) Shade - Shade can help keep buildings cool in the summer and make it cost less to use the air conditioner. Shade over parked cars can help keep them cooler too.
 Drawbacks Of Trees (Choose One Or More From Property Owner's Point-of-view) □ Leaves Clog Gutters - In the fall, leaves can collect in gutters and prevent water from flowing through them. They have to be removed by hand sometimes. □ Nuts Falling Could Damage Cars Or People - Some trees have nuts that are large and heavy. If they fall on a car or person, they could do damage. 	Animal Habitat - Many animals use trees for shelter and food. Trees protect animals from danger. Birds build nests in trees. Even if a bird doesn't build a nest, it can sit in a tree for safety. Squirrels spend most of their time in trees. Their nests are there, and they get food from trees too.
 ✓ Messy Fruit - Some trees have fruit that can make a mess when it falls onto the ground. 	☐ <i>Absorb Air Pollution</i> – Dust and other small particles in the air that are part of pollution are trapped by leaves. Trees help keep the air clean.
 ■ Shade Grass So It Won't Grow – Trees can shade the ground below them so much that other plants, such as grass, don't have enough sun to grow. That is a problem if you are trying to grow grass. ■ Branches Too Close To Buildings – A tree's branches can grow into buildings and may damage the building. They need to be pruned (cut) to prevent the damage. Sometimes trees have 	■ Water Pollution – Trees slow water down when it rains. That means the ground has more time to soak up the water, and not as much water has to flow across the ground into storm sewers. When water flows across the ground, it takes pollution that is on the ground with it.
to be cut down because they are just too close.	 ■ Block Unpleasant Views – Trees that are planted in the right place can block the view of something ugly. ■ Muffle Noise – The leaves of trees can make noise from traffic and other things less noticeable because the leaves muffle the sound.

Student page 2

Forest Tree Picture



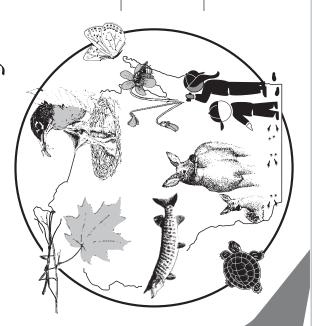
Urban Tree Picture



Certificate of Participation

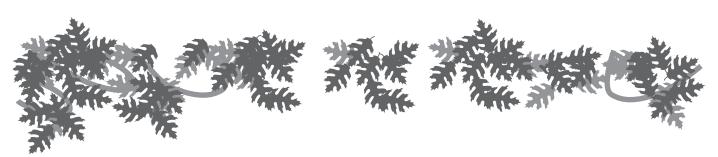
Forest Appreciation Writing Contest

2008 - My Favorite Forest Animal



Student

Chief State Forester
Wisconsin Department of Natural Resources
Division of Forestry



2008 4th Grade Writing Contest Judging Team Coordinators

Listed by CESA District*



Al Zelaya, WDNR 141 NW Barstow St, Room 180 Waukesha, WI 53188 (262) 574-2111

CESA Districts 4, 5, 6

Deb Johnson, WDNR 473 Griffith Avenue Wisconsin Rapids, WI 54494-7859 (715) 421-7841

CESA Districts 7, 8, 9

Cindy Kohles, WDNR 5350 Highway 133E P0 Box 305 Boscobel, WI 53805-0305 (608) 375-4232

CESA Districts 10, 11, 12

Janette Cain, WDNR 941 Mallard Lane, #104 Balsam Lake, WI 54810 (715) 485-3518

* Teachers please note: Judges are not affiliated with your local CESA office.

Forest Appreciation Week Writing Contest Entry Form

Each classroom entry must have this form. Submit only one (1) entry per classroom by March 7, 2008. Fill in the blanks.

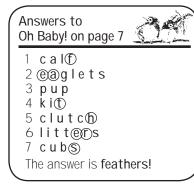
Attach this form to your chosen classroom entry and mail it to your CESA's judging team coordinator. Mailing addresses for the judging team coordinators are listed by CESA on the previous page.

Date	CESA District				
Student's Name					
Student's Address					
City	Zip	County			
Teacher's Name					
School Name					
School Address					
City	Zip	_ County			
Teacher's e-mail address					
School Phone ()					
Principal's Name					
Number of students in your classroom that participated					

(This question helps us determine the overall number of students participating in 2008.)

Wisconsin Cooperative Educational Service Agencies









Thinking about distributing Arbor Day tree seedlings this year? If so, below are a few simple tips for the care and distribution of tree seedlings to your students.

A. Prior to distribution of seedlings Have each student bring a clear plastic bag about the size of a bread wrapper from home.

B. When your seedling box or bag arrives

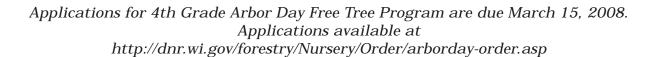
- Keep your trees cool. Refrigerate your seedlings (34-36 degrees Fahrenheit is ideal). Seedlings are perishable and should be refrigerated until planting time. DO NOT FREEZE. Do not store your trees in the sun, in a car trunk, in a heated classroom or other warm place before distributing them to your students.
- 2. Keep your trees moist. Do not open your sealed bag or box of seedlings. Leaving the bag closed will keep seedlings moist and cool until planting time.

C. At distribution time

- 1. Package individual seedlings.
 - Wrap the roots of each seedling in paper towels.
 - Dip the wrapped area of the seedling in water and place in the plastic bag.
 - Tie the bag closed above the roots using string, tape or twist ties.
- 2. Review planting instructions with your students. If children cannot plant their tree the day that they receive it, tell them to place it in the vegetable drawer of their refrigerator until it can be planted. Plant the seedling at approximately the same depth as it grew in the nursery or slightly deeper. Encourage students to plant their seedling as soon as possible. Emphasize that for the seedling to live, its roots must be

kept moist until it is planted. Remind students to select a planting site that will give the seedling room to grow and has correct light conditions.

- Dig a hole as deep as the root system and about 1 foot wide. (Remind children that the majority of a tree's feeder roots are in the upper six inches of soil where they compete with grass roots for oxygen, moisture and nutrients. Feeder roots thrive on soil that is loose, moist and fertile conditions often lacking in soils around homes.)
- Remove the seedling and if used, the paper towel from the bag and place it in the planting hole. Seedling roots should hang freely in the planting hole and not be crooked, crowded, twisted or bent.
- Crumble soil back around the roots and pack the soil gently after planting.
- Water your seedling. Water will finish packing the soil around the roots.
- Mulch your planting area to a depth of 2 inches and a radius of 9-12 inches. Make sure to pull the mulch away from the seedling's trunk to prevent bark rot.
- Remember to water the seedling weekly during dry periods. New trees need the equivalent of 1 to 1.5 inches of rainfall per week during their first year.
 - 3. Wish everyone tree–mendous success! And remind your students that "Every Day is Arbor Day!"





State of Wisconsin

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Attention: Genny Fannucchi - FR/4



My Favorite Forest Animall 4th Grade Statewide Writing Contest Deadline A March 7th, 2008